*Estimator's Corner*

# NEWSLETTER

July/August 2008

Project cost estimating data provided by the
Utah Department of Transportation Engineering Services Division

## This Issue's Featured Estimating Tip
## Asphalt Cost and Availability

Contractors are painfully aware of the limited supply of Hot Mix Asphalt (HMA) in the Rocky Mountain Region. The main supplier for this region is located in Blackfoot, Idaho and has exhausted its winter storage. They cannot provide enough asphalt to supply the demand in the region. They are currently fulfilling commitments to contractors already under contract. Any additional projects that require paving prior to October 15, 2008 may not receive the asphalt or most likely will pay an extreme price in order to import asphalt.

The Blackfoot facility has sufficient asphalt in storage to supply all of UDOT needs but that amount is 15-20 percent of the total amount needed in the entire region including other agencies and local governments. A supply facility is currently being built in Tooele, Utah to prevent this same supply shortage from occurring in the future but will not be fully functional for two more years. Asphalt supply crunch and extreme prices may be observed again in 2009.

The asphalt binder price per ton for 2008 began at $387. It is projected that the current value of $688 will drop back to about $450 per ton for the start of the 2009 season but will rise again as the supply becomes exhausted. This signifies that bid prices for HMA that started 2008 in the $65-75 range may start the 2009 season slightly higher in the $75-90 range for large quantities. Maintaining a sufficient supply is crucial to alleviate the price increase and the new facility in Tooele will deal with the shortage issue.

## Rising Prices
## Steel, Asphalt Binder, and Crude Oil

| Item | Monthly Rise | 12-Month Rise |
|---|---|---|
| Asphalt at Refineries | 11.7% | 52.2% |
| Concrete Products | 0.7% | 3.8% |
| Diesel Fuel | 5.7% | 85% |
| Highway and Street Construction | 2.9% | 18.9% |

# Crude Oil

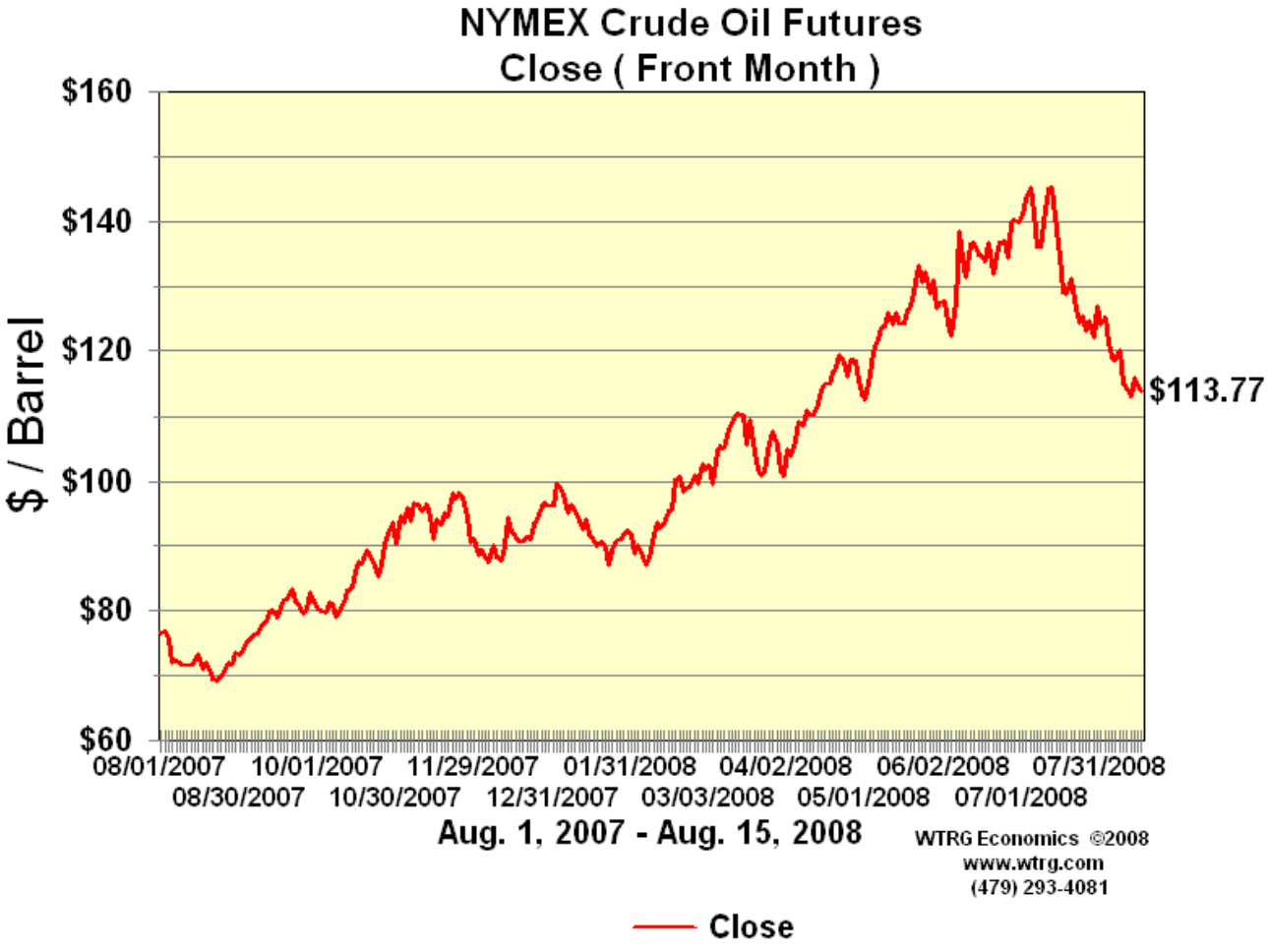
Highway paving contractors are feeling the immediate impact of crude oil prices topping $130 per barrel. The ENR 20-city average price for asphalt paving oil jumped 3.4%. This follows monthly increases of 1.7% and 2.7% during the previous two months. Three months of strong increases pushed asphalt paving prices 11.1% above the July 2007 level.
ENR- 7/7/08

**Percentage Changes in Producer Price Indexes for 2001-2008**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Net 12 Month Change |
|---|---|---|---|---|---|---|---|---|
| Crude Oil – Domestic Production | -42.4 | 60.6 | 14.3 | 30.5 | 49.6 | 0.1 | 52.4 | 105.6 |

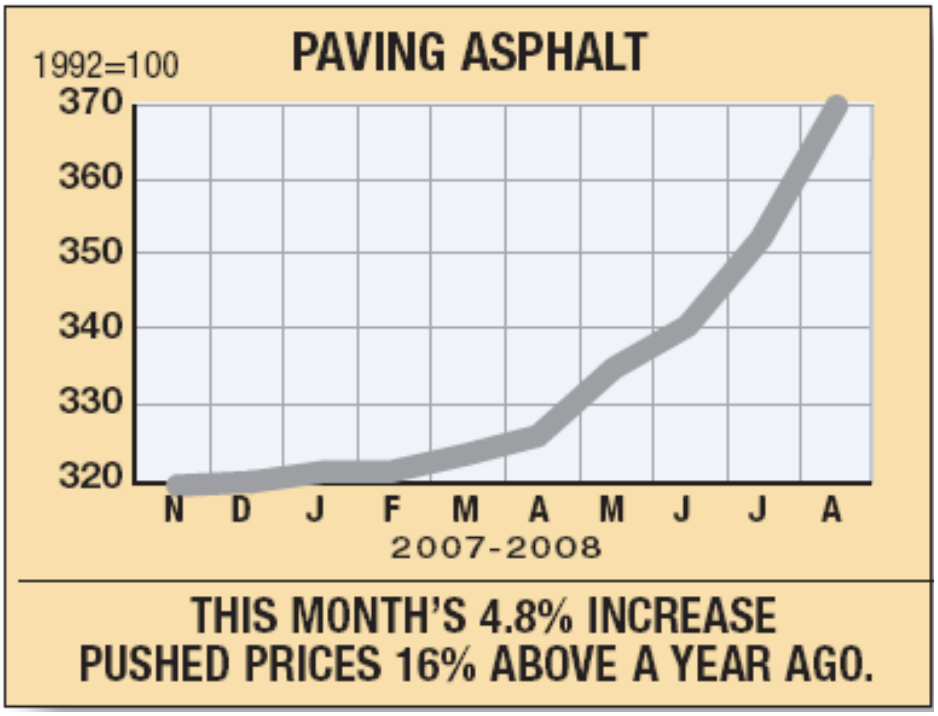
Bureau of Labor Statistics, AGC of America, 7/16/08

August 15, 2008, NYMEX West Texas Intermediate for September delivery closed down $1.24 at $113.77 per barrel.



# Asphalt

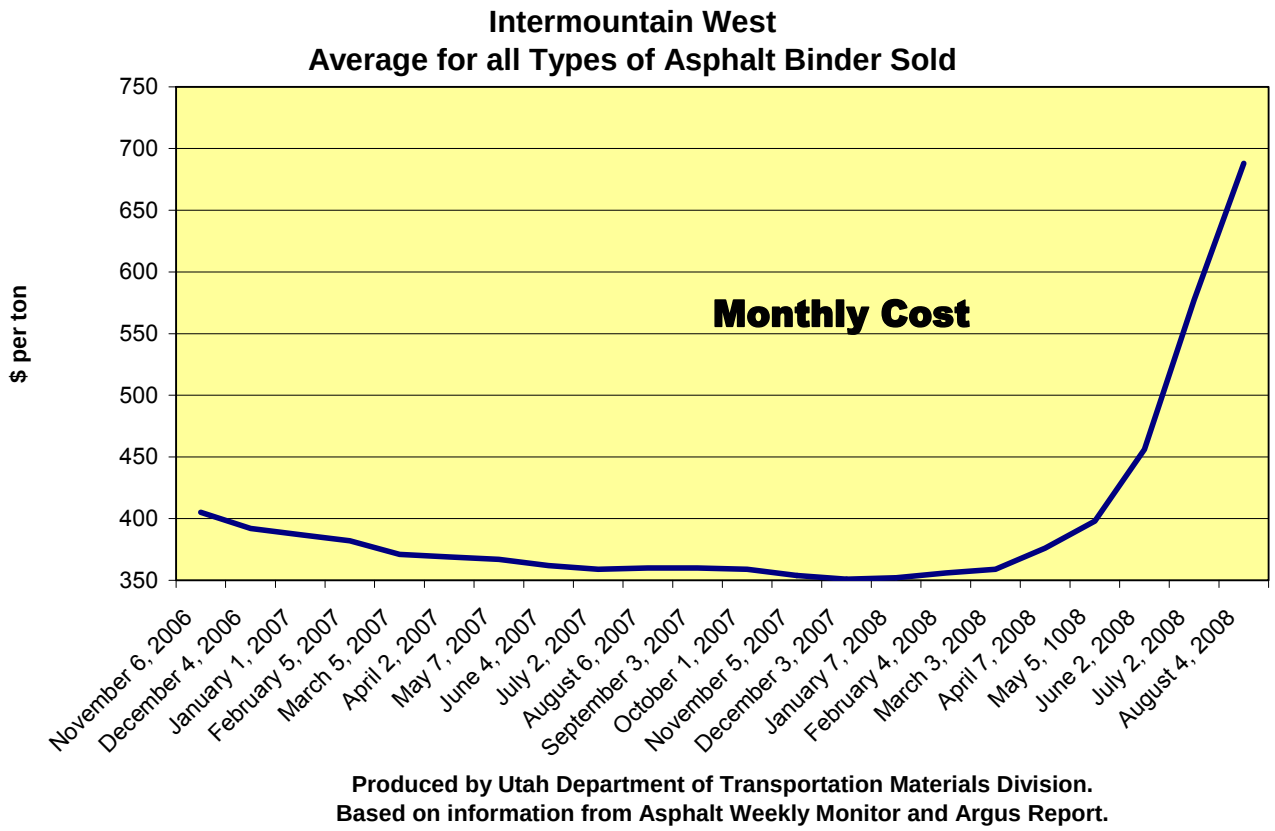
It was only a matter of time before record high crude oil prices started to impact asphalt paving costs. Asphalt paving prices are starting to move again after jumping over 25% at the beginning of last year according to the Bureau of Labor Statistics producer price index for asphalt paving products. The PPI for this product showed a 3.5% gain in April over last year's record high. ENR's 20-city average price for asphalt paving oil jumped 4.8% this month and is now up 16.1% above a year ago.
ENR- 8/11/08




**Percentage Changes in Producer Price Indexes for 2001-2008**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Net 12 Month Change |
|---|---|---|---|---|---|---|---|---|
| Asphalt at Refinery | - | - | 10.0 | 18.3 | 17.8 | 34.9 | 5.8 | 52.5 |

Bureau of Labor Statistics, AGC of America, 7/16/08

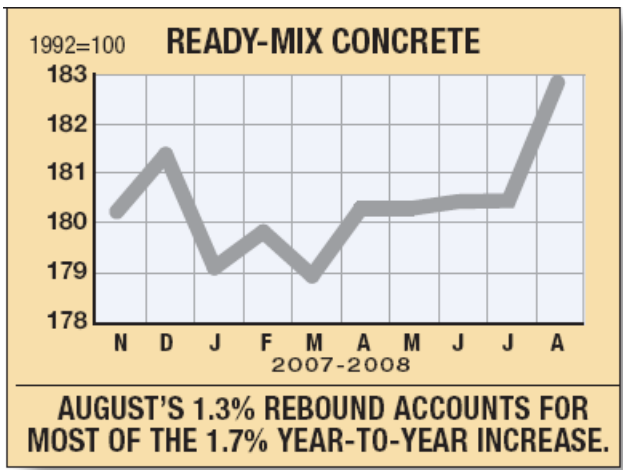


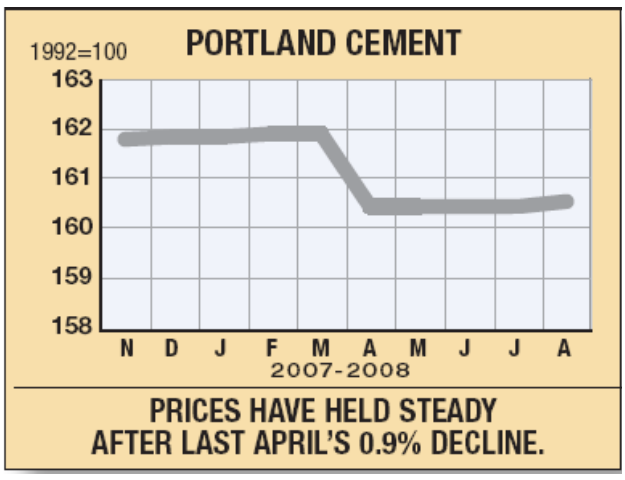

**Produced by Utah Department of Transportation Materials Division.**
**Based on information from Asphalt Weekly Monitor and Argus Report.**

Note: This graph is intended to show the direction of asphalt binder costs and not actual costs for asphalt binder.

## Cement

Portland cement prices have shown little movement following strong gains between 2005 and 2007. Cement prices are up just 0.2% for the year.
ENR- 6/2/08



**Percentage Changes in Producer Price Indexes for 2001-2008**

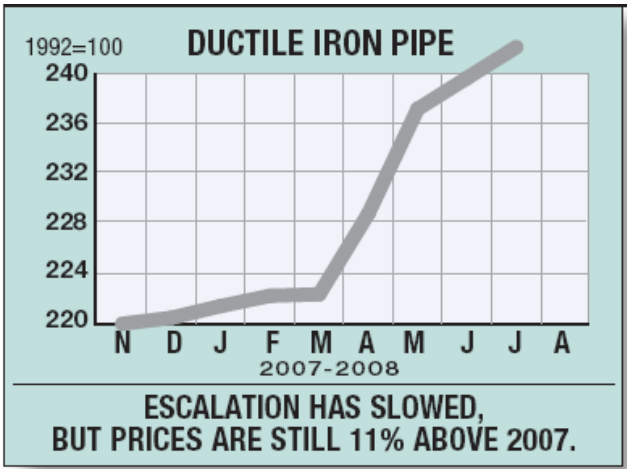
| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Net 12 Month Change |
|---|---|---|---|---|---|---|---|---|
| Construction Sand/Gravel/ Crushed Stone | 3.3 | 2.5 | 2.4 | 4.3 | 7.7 | 9.3 | 8.6 | 7.2 |
| Cement | 1.0 | 1.3 | -1.1 | 7.9 | 12.2 | 10.5 | 3.5 | 1.1 |
| Concrete Products | 2.5 | -0.3 | 1.5 | 7.6 | 10.1 | 8.1 | 3.3 | 3.8 |
| Ready-Mix Concrete | 2.5 | -1.1 | 1.1 | 8.7 | 11.3 | 10.1 | 3.3 | 2.9 |
| Precast Concrete Products | 0.7 | 0.3 | 2.5 | 6.0 | 6.0 | 4.7 | 4.8 | 4.7 |
| Prestressed Concrete Products | 5.3 | 1.8 | -0.2 | 8.2 | 14.3 | 4.9 | 1.2 | 2.4 |

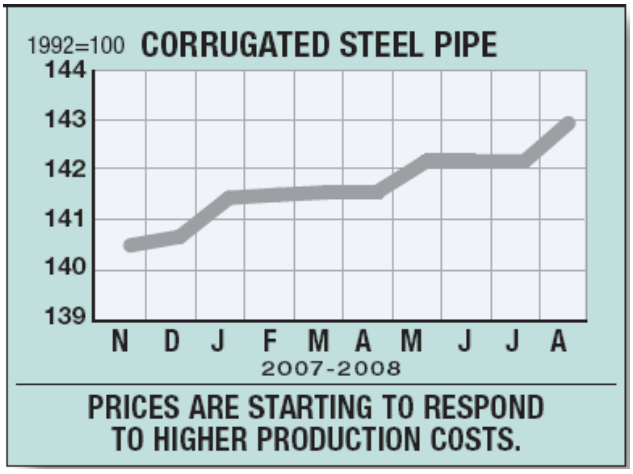
Bureau of Labor Statistics, AGC of America, 7/16/08

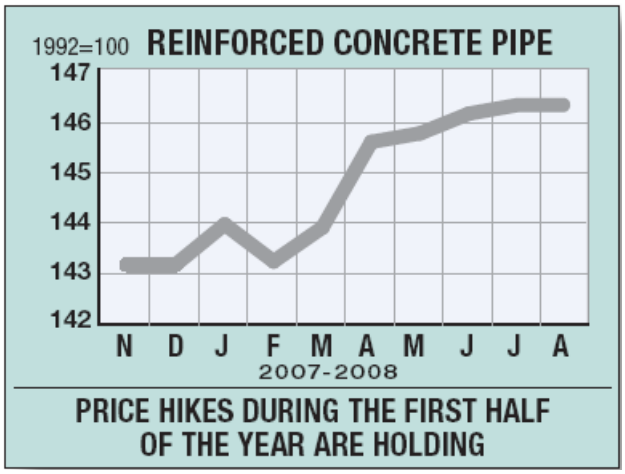
## Pipe

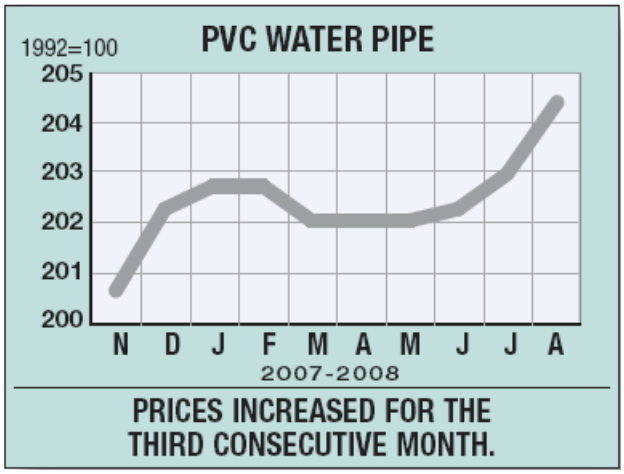
Iron ore prices are soaring along with steel scrap and other metal commodities. Among construction pipe products, ductile iron pipe has been impacted the most. The ENR 20-city average price for the pipe rose 1% this month following monthly increases of 1% in June, 4% in May, and 3% in April. The combined increases pushed prices for 8-inch diameter pipe 11% above a year ago.
ENR - 7/14/08

Prices for ductile iron pipe tracked by ENR are up between 7% and 11% from a year ago, due primarily from the spike in raw-material prices. Weak demand in the PVC water and sewer pipe markets are trumping high oil costs and the annual price increase for PVC pipe is about 2%.
ENR - 8/18/08





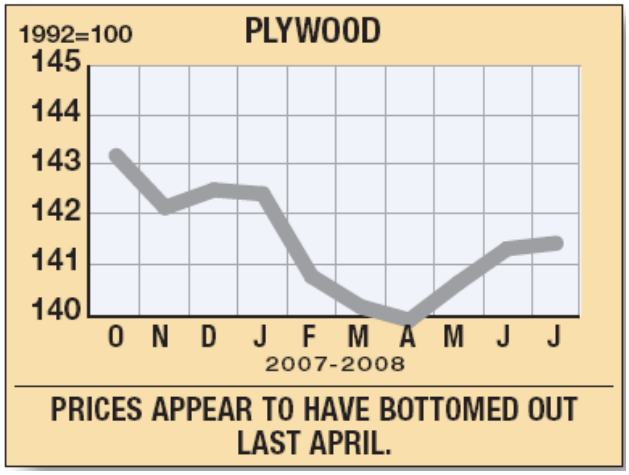



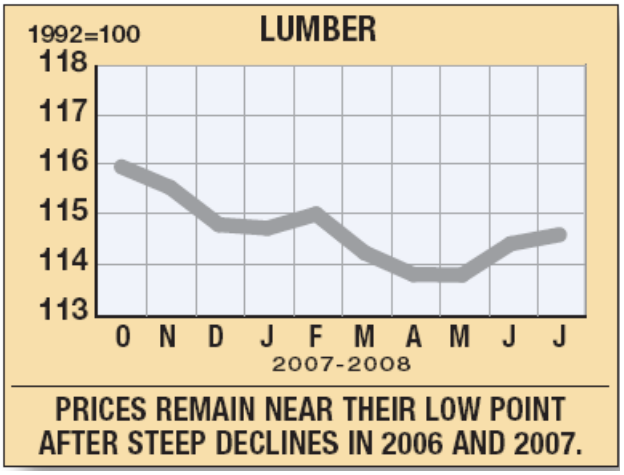

**Percentage Changes in Producer Price Indexes for 2001-2008**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Net 12 Month Change |
|---|---|---|---|---|---|---|---|---|
| Concrete Pipe | 4.4 | 1.7 | 1.4 | 5.5 | 7.5 | 2.5 | 1.1 | 12.7 |

Bureau of Labor Statistics, AGC of America, 7/16/08

## Lumber



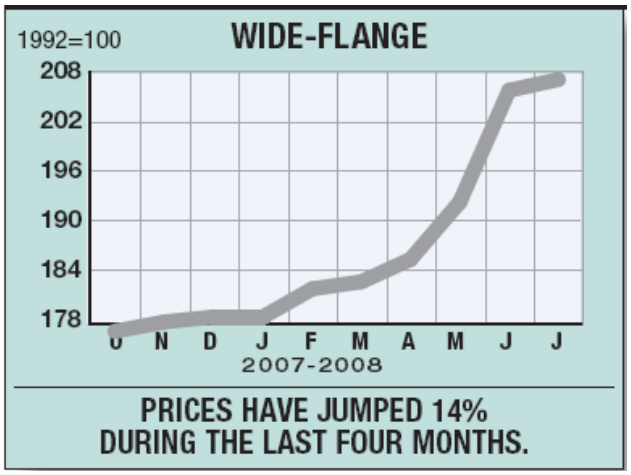

**Percentage Changes in Producer Price Indexes for 2001-2008**

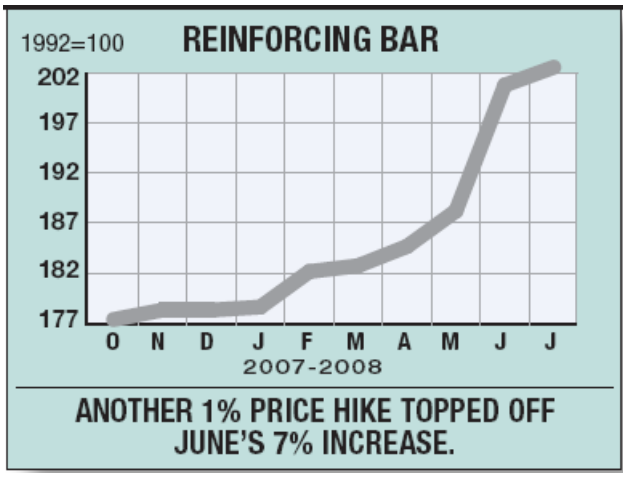
| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Net 12 Month Change |
|---|---|---|---|---|---|---|---|---|
| Lumber and Plywood | -2.9 | 1.4 | 13.1 | 5.0 | -1.1 | -10.8 | -1.3 | -2.8 |

Bureau of Labor Statistics, AGC of America, 7/16/08

# Steel

Producers of concrete reinforcing bar ratcheted up prices another 1% in July following record-breaking price increases during the previous three months (ENR 6/16 p. 61). The string of price hikes has pushed the ENR 20-city average price for grade-60 rebar 16% above July 2007's level. Prices never declined after jumping more than 42% in 2004. The 2004 and 2008 price spikes leaves the ENR average rebar price at about $42 per 100 lb. Rebar was selling for about $24 per 100 lb. in July 2003.
ENR – 7/28/08




**Percentage Changes in Producer Price Indexes for 2001-2008**

| Item | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Net 12 Month Change |
|---|---|---|---|---|---|---|---|---|
| Steel Mill Products | -6.1 | 11.1 | 1.7 | 48.8 | -3.8 | 11.6 | 1.0 | 30.4 |
| Hot-rolled Bars, Plates, and Structural Shapes | -4.3 | 2.1 | 11.3 | 53.8 | -1.0 | 7.5 | 8.1 | 28.1 |
| Steel Pipe and Tube | -3.7 | 9.1 | 3.3 | 66.0 | 1.2 | 5.5 | -1.9 | 30.7 |
| Fabricated Structural Metal | -1.3 | -2.4 | 0.1 | 24.7 | 2.8 | 3.6 | 5.3 | 14.6 |

Bureau of Labor Statistics, AGC of America, 7/16/08

## Estimate Support Meeting Minutes

July 30, 2008
- ☼ Proposal is being created for cost-based estimating for the regions.
- ☼ Development of parameters for additives.
- ☼ PDBS enhancement development continues.

July 1, 2008
- ~ Cost Estimator position advertised and applicants are being reviewed.
- ~ Prepared information for Systems Planning and Programming to help them estimate better.
- ~ Asphalt binder updates discussed.

June 20, 2008

☺ Discussed the status of monitoring the funding versus scope on design-build projects prior to advertising.

☺ All regions have received follow-up training from Gary Stanton.

June 5, 2008

► Steel, asphalt, and crude oil price increases were discussed.

Do you have estimating questions? Call Jason Henrie at 801-957-8605.

Do you have a suggestion for something you would like researched for a future edition of the Estimator's Corner Newsletter? Your suggestions are welcome and make the information in the Newsletter more useful for the readers.

Do you know anyone who would like to receive the monthly Estimator's Corner Newsletter? Please send your suggestions, ideas, questions, and requests to estimatorscorner@utah.gov and we will do our best to implement them.

## Percentage Changes in Producer Price Indexes (PPIs) for Construction Materials and Components, 2001-2008

| BLS Series ID | | 12 months through December-- | | | | | | | to June 2008 since-- | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 5/08 | 3/08 | 6/07 | 12/03 |
| **Table 1: Changes in Consumer, Producer & Construction Prices** | | | | | | | | | | | | |
| CUUR0000SA0 | Consumer price index (CPI-U) | 1.6 | 2.4 | 1.9 | 3.3 | 3.4 | 2.5 | 4.1 | 1.0 | 2.5 | 5.0 | 18.7 |
| WPUSOP3000 | Producer price index (PPI) for finished goods | -1.6 | 1.2 | 4.0 | 4.2 | 5.4 | 1.1 | 6.3 | 1.6 | 4.0 | 9.2 | 26.3 |
| WPUSOP2200 | PPI for materials and components for construction | 0.0 | 0.8 | 3.0 | 10.1 | 6.1 | 4.3 | 1.8 | 1.4 | 4.6 | 6.8 | 32.6 |
| PCU236211 | New industrial building construction | not available before 2008; series began 6/07 | | | | | | | -0.1 | 0.3 | 3.1 | n.a. |
| PCU236221 | New warehouse construction | not available before 2005 | | | | 7.5 | 8.1 | 4.4 | 0.0 | 0.7 | 4.2 | n.a. |
| PCU236222 | New school construction | not available; series began 12/05 | | | | | 17.3 | 2.0 | 1.6 | 1.4 | 3.4 | n.a. |
| PCU236223 | New office construction | not available; series began June 2006 | | | | | | 4.8 | -0.1 | 0.3 | 3.1 | n.a. |
| **Table 2: Changes in PPIs Weighted by Construction Types** | | | | | | | | | | | | |
| PCUBCON | Inputs to construction industries | -0.9 | 0.7 | 3.0 | 9.1 | 8.2 | 4.6 | 4.5 | 1.8 | 5.7 | 10.4 | 43.0 |
| PCUBHWY | Highway and street construction | -3.6 | 1.0 | 2.6 | 10.8 | 14.1 | 6.2 | 9.6 | 2.9 | 9.1 | 18.9 | 71.2 |
| PCUBHVY | Other heavy construction | -2.6 | 1.0 | 2.6 | 13.4 | 8.8 | 5.5 | 6.4 | 2.5 | 8.4 | 15.7 | 59.9 |
| PCUBBLD | Nonresidential buildings | -0.5 | 0.7 | 2.4 | 9.3 | 7.4 | 4.0 | 4.6 | 1.7 | 5.6 | 10.4 | 29.3 |
| PCUBRSM | Multi-unit residential | -0.1 | 0.4 | 2.7 | 8.9 | 7.8 | 4.9 | 3.7 | 1.5 | 4.6 | 7.7 | 38.4 |
| PCUBRS1 | Single-unit residential | -0.4 | 0.6 | 3.5 | 7.0 | 6.9 | 4.2 | 2.4 | 1.3 | 3.6 | 5.9 | 30.9 |
| **Table 3: Changes in PPIs for Specific Construction Inputs** | | | | | | | | | | | | |
| WPU057303 | #2 diesel fuel | -44.7 | 54.4 | 13.0 | 37.9 | 46.7 | 2.3 | 33.9 | 5.7 | 18.5 | 85.0 | 329.2 |
| WPU05810112 | Asphalt (at refinery) | not available | | 10.0 | 18.3 | 17.8 | 34.9 | 5.8 | 11.7 | 42.3 | 52.5 | 222.3 |
| WPU13940113 | Asphalt paving mixtures and blocks | not available | | | 4.2 | 14.4 | 27.7 | 1.4 | 6.7 | 14.0 | 17.0 | 81.6 |
| WPU136 | Asphalt felts and coatings | 4.6 | -0.6 | 6.3 | 4.1 | 15.3 | 5.0 | -2.5 | 3.6 | 12.2 | 15.3 | 42.6 |
| WPU1361 | Prepared asphalt & tar roofing & siding products | 5.0 | -1.7 | 5.3 | 4.6 | 16.2 | 5.2 | -2.4 | 3.2 | 12.8 | 15.6 | 44.5 |
| WPU133 | Concrete products | 2.5 | -0.3 | 1.5 | 7.6 | 10.1 | 8.1 | 3.3 | 0.7 | 1.9 | 3.8 | 36.5 |
| WPU1331 | Concrete block and brick | 2.3 | 1.6 | 3.2 | 4.7 | 8.1 | 6.8 | 3.2 | 0.6 | 1.5 | 2.6 | 27.8 |
| WPU1332 | Concrete pipe | 4.4 | 1.7 | 1.4 | 5.5 | 7.5 | 2.5 | 1.1 | 2.7 | 3.5 | 12.7 | 33.2 |
| WPU1333 | Ready-mixed concrete | 2.5 | -1.1 | 1.1 | 8.7 | 11.3 | 10.1 | 3.3 | 0.5 | 1.3 | 2.9 | 40.1 |
| WPU1334 | Precast concrete products | 0.7 | 0.3 | 2.5 | 6.0 | 6.0 | 4.7 | 4.8 | 0.3 | 3.9 | 4.7 | 28.8 |
| WPU1335 | Prestressed concrete products | 5.3 | 1.8 | -0.2 | 8.2 | 14.3 | 4.9 | 1.2 | 0.8 | 1.1 | 2.4 | 35.1 |
| WPU1342 | Brick and structural clay tile | 5.3 | 1.9 | 0.7 | 3.0 | 9.4 | 6.0 | -0.2 | -0.5 | -0.9 | -0.8 | 18.7 |
| WPU072106 | Plastic construction products | -2.7 | 3.1 | 3.2 | 7.2 | 21.6 | -0.7 | 0.3 | 0.8 | 2.1 | 2.8 | 32.9 |
| WPU137 | Gypsum products | 0.4 | 3.4 | 2.8 | 20.0 | 18.8 | 5.5 | -22.2 | -0.4 | -1.5 | -13.8 | 17.2 |
| WPU1392 | Insulation materials | 0.4 | -1.5 | 2.0 | 8.6 | 2.6 | 2.1 | -3.3 | -0.3 | -1.1 | -4.6 | 7.9 |
| WPUSI004011 | Lumber and plywood | -2.9 | 1.4 | 13.1 | 5.0 | -1.1 | -10.8 | -1.3 | 0.9 | 4.8 | -2.8 | -5.6 |
| WPU062101 | Architectural coatings | 2.9 | 0.6 | 3.9 | 5.3 | 9.2 | 6.3 | 4.1 | 0.1 | 0.0 | 4.0 | 32.3 |
| WPU1017 | Steel mill products | -6.1 | 11.1 | 1.7 | 48.8 | -3.8 | 11.6 | 1.0 | 8.1 | 26.3 | 30.4 | 121.8 |
| WPU101704 | Hot-rolled bars, plates, & structural shapes | -4.3 | 2.1 | 11.3 | 53.8 | -1.0 | 7.5 | 8.1 | 4.4 | 22.8 | 28.1 | 134.7 |
| WPU101706 | Steel pipe and tube | -3.7 | 9.1 | 3.3 | 66.0 | 1.2 | 5.5 | -1.9 | 6.9 | 16.9 | 30.7 | 130.8 |
| WPU102502 | Copper and brass mill shapes | -9.5 | -1.6 | 11.6 | 29.6 | 31.0 | 44.4 | -3.8 | -4.4 | -2.7 | -0.9 | 164.8 |
| WPU102501 | Aluminum mill shapes | -2.9 | -0.9 | -0.5 | 9.9 | 5.0 | 12.7 | -1.7 | 0.0 | 3.1 | 1.7 | 36.6 |
| WPU1073 | Sheet metal products | -0.8 | 2.0 | 0.6 | 15.2 | 0.4 | 6.5 | 0.4 | 1.2 | 5.9 | 7.5 | 32.4 |
| WPU107405 | Fabricated structural metal | -1.3 | -2.4 | 0.1 | 24.7 | 2.8 | 3.6 | 5.3 | 1.6 | 8.9 | 14.6 | 58.0 |
| WPU10740501 | Fabricated structural metal for buildings | -1.5 | -3.3 | -0.1 | 20.0 | 3.1 | 3.3 | 4.7 | 1.3 | 6.8 | 12.4 | 48.7 |
| WPU107408 | Architectural and ornamental metalwork | -0.1 | 3.7 | 0.7 | 23.5 | 3.1 | 4.9 | 2.8 | 2.2 | 8.7 | 10.8 | 50.8 |
| WPU107409 | Fabricated iron & steel pipe, tube, & fittings | 0.6 | 0.1 | 1.2 | 32.6 | 5.5 | -2.8 | -1.6 | -0.7 | 6.6 | 5.4 | 43.4 |
| WPU1076 | Fabricated steel plate | 0.6 | -1.0 | 0.6 | 7.6 | 0.6 | 8.6 | 9.9 | -1.6 | 15.9 | 22.5 | 46.3 |
| WPU1079 | Prefabricated metal buildings | 0.0 | 4.0 | -0.7 | 35.5 | 2.0 | 5.5 | 1.8 | 5.4 | 18.3 | 25.6 | 85.2 |
| WPU112 | Construction machinery and equipment | -0.1 | 1.9 | 1.3 | 6.0 | 4.9 | 3.6 | 2.2 | 0.5 | 0.8 | 2.7 | 20.1 |
| **Table 4: Changes in PPIs for Basic Inputs Important to Construction** | | | | | | | | | | | | |
| WPU056 | Crude petroleum (domestic production) | -42.4 | 60.6 | 14.3 | 30.5 | 49.6 | 0.1 | 52.4 | 4.4 | 21.2 | 105.6 | 337.9 |
| WPU0553 | Industrial natural gas | -36.7 | 12.2 | 20.3 | 20.1 | 31.5 | -13.2 | -4.6 | 5.4 | 18.9 | 23.7 | 69.3 |
| WPU066 | Plastic resins and materials | -9.8 | 9.2 | 6.4 | 28.6 | 10.8 | -7.8 | 10.0 | 0.7 | 4.2 | 11.7 | 52.7 |
| WPU1321 | Construction sand/gravel/crushed stone | 3.3 | 2.5 | 2.4 | 4.3 | 7.7 | 9.3 | 8.6 | 0.2 | 0.0 | 7.2 | 38.8 |
| WPU1322 | Cement | 1.0 | 1.3 | -1.1 | 7.9 | 12.2 | 10.5 | 3.5 | -0.2 | -0.4 | 1.1 | 40.5 |
| WPU1011 | Iron ore | 1.5 | -1.3 | 1.6 | 6.7 | 15.5 | 7.5 | 1.3 | 0.0 | 8.1 | 12.6 | 50.5 |
| WPU1012 | Iron and steel scrap | -5.6 | 27.8 | 64.9 | 50.8 | -10.8 | 2.9 | 30.4 | 0.3 | 44.5 | 96.9 | 230.2 |
| WPU101212 | Stainless and alloy steel scrap | no data from 1996 until September 2006 | | | | | | -7.7 | -19.7 | -19.2 | -30.9 | n.a. |
| WPU102102 | Copper ores | -19.6 | 3.6 | 37.4 | 65.1 | 39.3 | 53.1 | -0.9 | 3.4 | 5.5 | 7.3 | 317.0 |
| WPU102301 | Copper base scrap | -17.4 | 11.2 | 30.7 | 34.5 | 51.9 | 50.0 | 1.2 | -5.3 | 1.0 | 14.4 | 273.9 |

Updated 7/16/08 Source: Bureau of Labor Statistics (BLS): www.bls.gov/cpi for CPI, www.bls.gov/ppi for PPIs

Compiled by Ken Simonson (simonsonk@agc.org), Chief Economist, Associated General Contractors of America, www.agc.org